

## 2.

A New Genus and Species of Orneodidae (Moths) from Rancho Grande, North-central Venezuela.<sup>1</sup>

HENRY FLEMING.

*Entomologist, Department of Tropical Research,  
New York Zoological Society.*

(Plate I; Text-figure 1).

[This is one of a series of papers resulting from the 45th and 46th Expeditions of the Department of Tropical Research of the New York Zoological Society, made during 1945 and 1946 under the direction of Dr. William Beebe with headquarters at Rancho Grande in the National Park of Aragua, Venezuela. The expeditions were made possible through the generous co-operation of the National Government of Venezuela and of the Creole Petroleum Corporation.

[The characteristics of the research area are in brief as follows: Rancho Grande is located in north-central Venezuela (10° 21' N. Lat., 67° 41' W. Long.), 80 kilometers west of Caracas, at an elevation of 1,100 meters in the undisturbed montane cloud forest which covers this part of the Caribbean range of the Andes. Adjacent ecological zones include seasonal forest, savanna, thorn woodland, cactus scrub, the fresh water lake of Valencia, and various marine littoral zones. The Rancho Grande area is generally subtropical, being uniformly cool and damp all the year because of the mountain cloud cap. The dry season extends from January until April. The average humidity during the expeditions, including parts of both wet and dry seasons, was 92.4%; the average temperature during the same period was 18° C.; the average annual rainfall over a 5-year period was 174 cm. The flora is marked by an abundance of mosses, ferns and epiphytes of many kinds, as well as a few gigantic trees. For further details see Beebe & Crane, *Zoologica*, Vol. 32, No. 5, 1947. Unless otherwise stated, the specimens discussed in the present paper were taken in the montane cloud forest zone, within a radius of 1 kilometer of Rancho Grande.]

## INTRODUCTION.

Four individuals of Orneodidae were collected at Rancho Grande, Venezuela, in 1946. All the specimens belong to a new genus and species. The specimens were captured along the road connecting Rancho Grande with Ocumare de la Costa, between kilometers 24 and 26. This region is approximately 3,400 feet high and is on the ocean side of the pass. The area is usually blanketed in clouds for the greater part of the day with the result that the vegetation rarely fails to be dripping with moisture (see Beebe and Crane, 1947, for maps and ecology).

The specimens were caught at separate times in 1946 but always on foggy days. It was necessary to beat the fog-drenched

bushes to startle the moths into flight, and unfortunately the insects were usually deluged. Three of the specimens were caught at the base of high, moist banks and the remaining specimen less than 15 feet from a similar bank. The pyraustid moth *Lamprosema coeruleonigra* Schaus was very common in the localities where the orneodids were taken and were distinctly partial to the same type of ecological niche. No Orneodidae were taken at lights although we operated lamps in this area in an attempt to collect larger series.

I wish to express my thanks to Miss Pamela Marmont for the venation-figure and to Sam Dunton for the photographs.

***Alinguata***, new genus.

Text-fig. 1.

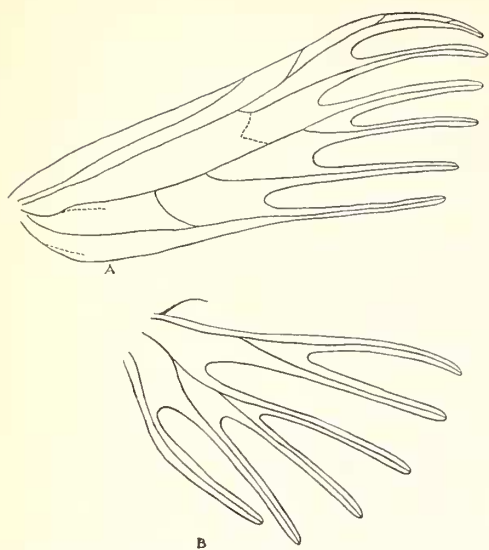
*Tongue and maxillary palpi absent.* Labial palpi decumbent and as long as width of eye. First joint of labial palpi bulbous; at its distal end broader than second and third joints; pedunculate at its juncture with the head. Second joint with a ventro-lateral tuft of specialized scales extending well along the third joint. Third joint of labial palpi acuminate and as long as second joint. Ocelli conspicuous and very slightly separated from eye. Vertex of head with a prominent anterior bulge, conical in outline looking down on head from above. Angle formed by vertex and front of head acute. The above characters have been determined from a detached head with the scales removed.

Legs slender. Epiphysis covered with long scales extending to first tarsal joint. One pair of spurs on mesothoracic legs and two pairs on metathoracic legs, with the outer spurs slightly shorter than inner spurs.

*Forewings not deeply cleft as in Orneodes.* Clefts in cell  $R_5$  and in cell  $M_2$  approximately equal in depth and cleft for one-quarter of wing. Cleft in cell  $M_1$  extends for one-third of wing and cleft in cell  $M_3$  but slightly more. Cleft in cell  $Cu_1$  reaches almost to one-half of wing measured along caudal margin of plume  $Cu_1$ .

Frenulum in hindwing long and prominent. Clefts of hindwing as follows: Cleft in cell R is one-half of length of wing measured along costal margin, cleft in cell  $M_1$  is five-sixths of length of wing measured

<sup>1</sup>Contribution No. 784, Department of Tropical Research, New York Zoological Society.



TEXT-FIG. 1. *Alinguata neblina*. Paratype: (Cat. No. 46132). A, venation of forewing. B, venation of hindwing.

from tip of plume  $M_1$  to base of wing, cleft in cell  $M_2$  is slightly more than one-half of length of wing measured from tip of plume  $M_2$  to base of wing, cleft in cell  $M_3$  is two-thirds of length of wing measured from tip of plume  $M_3$  to base of wing, and cleft in cell  $Cu_1$  is deepest of all, extending almost to base of wing.

In the forewing only vein  $R_1$  of radials completely absent, but vein  $R_3$  and vein  $R_4$ , which are short and located in first plume, very faint. Vein  $R_5$  a strong tubular vein. Traces of upper discocellular vein present. Vein  $Cu_2$  strongly divergent from cell and fuses with vein  $2d$  A well before beginning of plume  $Cu_2$   $2d$  A. See text-figure 1 for venation of fore and hindwing.

*Alinguata* will run to *Paelia* in Meyrick's key (1910, p. 2), from which it may be distinguished by the absence of a tongue. In addition, the third joint of the labial palpi is as long as the second joint in *Alinguata* while the third joint of the labial palpi in *Paelia* is described in the literature as short. If I am correct in interpreting Meyrick's discal cleft (1910, p. 3) as the cleft in cell  $M_2$ , then an additional difference may be noted; this cleft extends to one-half of the forewing in *Paelia* but in *Alinguata* for only a quarter. Walker (1866, p. 1846) in his original description of the genus *Paelia* states that the labial palpi are decumbent, but Meyrick (1910, p. 3) writes that they ascend; in *Alinguata* they are decumbent.

Genotype, *Alinguata neblina*, new species, described below.

#### *Alinguata neblina*, new species.

##### Plate I.

Length of forewing of male 6 mm., of female 7.5 mm.

Head loosely covered with grayish-brown scales. Dorsum of thorax covered with black-

ish-brown scales while the spatulate scales of the patagia have an additional grayish glitter under the microscope. Ventrum of thorax shining, grayish-white. Coxae and femurs silvery gray with scattered brown scales but tibiae brown with scattered gray scales. Prothoracic legs darker than remaining legs. Epiphyses brown. Spurs brown with tan tips. Tarsal segments brown mixed with a few gray scales. A narrow gray band circles each tarsal segment but least prominent on metathoracic legs. Distal band of each leg faintest.

Dorsum of abdomen dark brown and ventrum gray. Abdomen unbanded.

Upper side of wings brownish-black with bluish-white markings in daylight. Under the microscope the color of the wings is bronzy-chocolate brown similar to the colored figure of *Paelia lunuligera* Walker in Meyrick (1910) and the white markings are shining grayish-white. Latter restricted to plumed part of wings and costal margin of forewings.

Forewings with minute patch of grayish-white scales one-eighth from base of wing on costal margin, and a short streak of grayish-white scales approximately one-half from base. Two half circles or crescents composed of grayish-white scales with their centers on the costal margin of the wing are distad of the streak. The three figures are approximately equidistant from each other with the most distal half circle located in the vicinity of the base of the first plume. A very short, grayish-white streak is present in the caudal region of first plume and a grayish-white line distad of the streak runs diagonally across the plume. Another grayish-white half circle follows which is smaller than the half circles previously mentioned and located on the unplumed section of the costal margin. The last figure along the costal margin of the wing is a subterminal streak.

Three V-shaped figures are present on the second plume equidistant from each other and a small irregular patch of grayish-white scales near the base of the plume. These and subsequent Vs mentioned have their apices pointing toward the base of the wing. They are not perfectly shaped Vs like those on the wings of *Paelia lunuligera* Walker and many species of *Orneodes*, as the arms of the V are widespread, and the apices not sharp or pointed.

The third plume also has three equidistant Vs. There is a small patch of grayish-white scales at the base of the third plume on its cephalic margin and another patch on the caudal margin. The latter patch extends over on the fourth plume.

The fourth plume has three Vs but differs from the other plumes in that the two basal Vs are close together.

The fifth plume resembles plumes two and three.

The sixth or last plume has only two Vs. This plume has a small patch of grayish-white figures approximately one-quarter from the base of the plume on the inner

margin of the wing, and another patch at the base of the cephalic margin of the plume.

Ground color of hindwing brownish-black. A patch of white spatulate scales along the costal margin of basal third of wing. A half-circle near the base of the first plume differs from those on the forewing in lying on the inner margin of the first plume rather than on the costal margin. Its center is likewise on the inner margin. There is a V subterminal figure on the first plume. Each of the remaining plumes has four Vs equally spaced from one another, except the last or sixth plume which has only two Vs.

Under side of wings the same as upper, except that the half circle figures along the costal margin of the forewings incomplete on the under side.

Material: A total of four specimens taken as follows: Rancho Grande, north-central

Venezuela: June 24, ♀ holotype (Cat. No. 461069); July 3, ♂ allotype (Cat. No. 461067); March 18, ♀ paratype (Cat. No. 46132); July 7, ♂ paratype (Cat. No. 461068).

#### REFERENCES CITED.

BEEBE, W. & CRANE, J.

1947. Ecology of Rancho Grande, a subtropical cloud forest in northern Venezuela. *Zoologica*, 32: 1, pp. 43-60.

MEYRICK, E.

1910. Genera Insectorum. Family Orneodidae, 108.

WALKER, F.

1866. List of the specimens of lepidopterous insects in the collection of the British Museum. *Lepidoptera Heterocera*, 35.

## EXPLANATION OF THE PLATE.

## PLATE I.

- Fig. 1. *Alinguata neblina*. Holotype: (Cat. No. 461069). Upper side of wings and body.
- Fig. 2. Under side.





FIG. 1.



FIG. 2.

A NEW GENUS AND SPECIES OF ORNEODIDAE (MOTHS)  
FROM RANCHO GRANDE, NORTH-CENTRAL VENEZUELA.